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LETTERS AND CORRESPONDENCE

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Fig. 1. Skin lesions on neck and legs. Case 1.

Post-Chemotherapy Sweet's Syndrome in Three Patients With AML

To the Editor: Sweet's syndrome (SS), called ''Acute Febrile Dermatitis,'' has been associated with Acute Myeloid Leukemia (AML) [1]. The low frequency of this association (6%) is even rarer with neutropenia [2]. Here we report three cases of AML with SS during the postchemotherapy period.

The skin lesions of SS are soft nodules, usually in the arms, legs, and trunk [3]. The histology shows a perivascular neutrophil infiltrate in the dermis. It is associated with leukocytosis, fever, arthromyalgia, and sometimes ocular and renal symptoms. The physiopathology of SS is still unknown. The use of ATRA, CSFs, and other cytokines has now been related to the appearance of SS. Half of the cases described were idiopathic.

Case 1 was a female, aged 64, with hematomas and malaise, white blood cell count (WBC) 5.9×10^9/L, with 40% blast cells. She was diagnosed with AML-M1 and treated with a 3-7 regime, achieving complete remission. She repeated treatment for consolidation and, on the second day postreatment when granulocytes were 2.9×10^9/L, she developed flu-like symptoms, fever, and painful erythemato-violet confluent dermic lesions in the legs and neck (Fig. 1). The skin biopsy showed a dense perivascular inflammatory infiltrate with frequent signs of leukocytoclasis, necrosis, and intense edema, not affecting the wall vessel.

Case 2 was a female, aged 27, complaining of fever, hematomas, gingivitis, and gingivorragies, WBC 5.6×10^9/L (28% blasts, 13% promyelocytes). Coagulation tests confirmed a DIC picture. Bone marrow (BM) showed massive blastic infiltration, diagnosed with AML-M3. She was treated with a 3-7 regime and ATRA. On the fourth day postreatment when she had granulocytes 0.7×10^9/L, she developed fever, arthralgia, and myalgia, with a cutaneous manifestation similar to the previous case in the face and forehead. The biopsy showed an intense edema in the dermis and a neutrophilic infiltrate among the collagen fibers.

Case 3 was a male, aged 65, with malaise, asthenia, anorexia, and weight loss, WBC 28×10^9/L. Blastic infiltration of AML-M4 cells was 90% in BM and 60% in peripheral blood. He was treated with the 3-7 regime. On the fifth day postchemotherapy, he had arthromyalgia, fever, painful maculopapulomatous red-violet lesions on the skin of the arms and neck, and granulocytes were 0.34×10^9/L. The biopsy shows dermic edema with neutrophilic infiltrate without necrosis.

All three patients had fever and cutaneous lesions unresponsive to antibiotics, which rapidly disappeared with prednisone (1 mg/k/p.o./daily). In the cases reported of SS associated with AML, the SS exists at the time of diagnosis and is the reason for the consultation. This was not seen in any of our three patients [1]. In these cases, lesions appeared between the first and fifth day post-chemotherapy when two of the patients were neutropenic. In patients with AML, SS is usually more serious, but not in our cases. Two of our patients had lesions on the neck, although this localization is rare [3]. Skin lesions are frequent in patients with AML and are often confusing. We believe it is important to remember that they may correspond to SS. By keeping this possibility in mind, correct therapy can be initiated and unnecessary additional treatments can be avoided.

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